

IN THE CLAIMS:

Please amend the claims as follows:

1-45 (Canceled).

46. (Previously presented) A composition for the removal of etch residues from integrated circuits using copper materials, which consists essentially of:

a choline compound;

water; and

an organic solvent selected from the group consisting of dimethyl sulfoxide, dimethyl acetamide, ethylene glycol, ethylene glycol alkyl ether, diethylene glycol alkyl ether, triethylene glycol alkyl ether, propylene glycol, propylene glycol alkyl ether, N-methyl pyrrolidone, ethylene diamine, ethylene triamine, monoethanolamine, and diglycolamine.

47. (Previously presented) The composition of claim 46 in which the composition consists essentially of from about 10 percent by weight to about 50 percent by weight of the choline compound; from about 10 percent by weight to about 80 percent by weight of water; and from about 20 percent by weight to about 80 percent by weight of the organic solvent.

48. (Previously presented) A composition for the removal of etch residues from integrated circuits using copper materials, which consists essentially of:

a choline compound;

water;

hydroxylamine or hydroxylamine salt; and

an organic solvent selected from the group consisting of dimethyl sulfoxide, dimethyl acetamide, ethylene glycol, ethylene glycol alkyl ether, diethylene glycol alkyl ether, triethylene glycol alkyl ether, propylene glycol, propylene glycol alkyl ether, N-methyl pyrrolidone, ethylene diamine, ethylene triamine, monoethanolamine, and diglycolamine.

49. (Previously presented) A composition for the removal of etch residues from integrated circuits using copper materials, which consists essentially of:

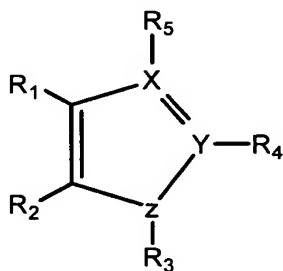
a choline compound;

water;

an organic solvent selected from the group consisting of dimethyl sulfoxide, dimethyl acetamide, ethylene glycol, ethylene glycol alkyl ether, diethylene glycol alkyl ether, triethylene glycol alkyl ether, propylene glycol, propylene glycol alkyl ether, N-methyl pyrrolidone, ethylene diamine, ethylene triamine, monoethanolamine, and diglycolamine; and

from about 0.5% by weight to about 5% by weight of a corrosion inhibitor selected from the group consisting of :

compounds of the general class

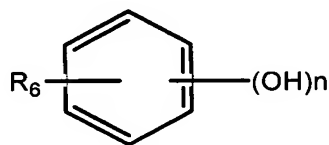


where X, Y, and Z, are chosen from C, N, O, S, and P; and

where pendant R groups  $R_1$ - $R_5$  are chosen from H, a substituted  $C_1$ - $C_6$  straight, branched or cyclo alkyl, alkenyl or alkynyl group, straight or branched alkoxy group, a substituted acyl group, amidyl group, hydroxyl group, a halogen, carboxyl group, alkoxyalkyl group, alkylamino group, alkylsulfonyl group, and sulfonic acid group;

salts of said compounds of the general class;

hydroxybenzene compounds of the general class



where  $n = 1-4$ , and

where  $R_6$  is present from 2 to 5 times and is chosen from H, a substituted  $C_1$ - $C_6$  straight, branched or cyclo alkyl, alkenyl or alkynyl group, straight or branched alkoxy group, a

substituted acyl group, amidyl group, a halogen, carboxyl group, alkoxyalkyl group, alkylamino group, alkylsulfonyl group, sulfonic acid group; and salts of said hydroxybenzene compounds.

50. (Previously presented) The composition of claim 49, wherein X is nitrogen, Y is nitrogen, Z is carbon, and R<sub>1</sub>-R<sub>5</sub> are hydrogen.

51. (Previously presented) The composition of claim 49, wherein X, Y, and Z are nitrogen, R<sub>3</sub> is hydrogen, and R<sub>4</sub> and R<sub>5</sub> constitute a benzene ring.

52. (Previously presented) The composition of claim 49, wherein the corrosion inhibitor is selected from the group consisting of catechol, t-butyl catechol, gallic acid, and benzotriazole.

53. (Previously presented) The composition of claim 49, wherein the choline compound is choline hydroxide or a choline salt.

54. (Previously presented) The composition of claim 48, wherein the choline compound is choline hydroxide or a choline salt.

55. (Previously presented) The composition of claim 46, wherein the choline compound is choline hydroxide or a choline salt.

56-57. (Canceled).

58. (Previously presented) A composition for stripping photoresist from integrated circuits using copper materials and low k dielectric materials consisting essentially of:

a choline compound;

from about 2 to about 12% by weight of hydroxylamine or hydroxylamine salt; water; and

an organic solvent selected from the group consisting of dimethyl acetamide, dimethyl sulfoxide, propylene glycol, dipropylene glycol monomethyl ether, N-methyl pyrrolidone, and cyclohexyl pyrrolidone.

59. (Previously presented) The composition of claim 58, wherein the choline compound is choline hydroxide or a choline salt.

60. (Previously presented) A composition for the removal of etch residues from integrated circuits using copper materials and low k dielectric materials consisting essentially of:

a choline compound;

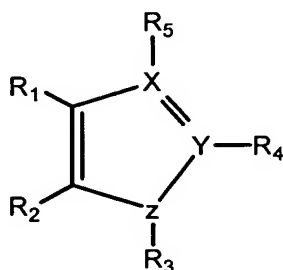
water;

from about 2 to about 12% by weight of hydroxylamine or hydroxylamine salt;

an organic solvent selected from the group consisting of dimethyl sulfoxide, dimethyl acetamide, ethylene glycol, ethylene glycol alkyl ether, diethylene glycol alkyl ether, triethylene glycol alkyl ether, propylene glycol, propylene glycol alkyl ether, N-methyl pyrrolidone, ethylene diamine, ethylene triamine, monoethanolamine, and diglycolamine; and

from about 0.5% by weight to about 5% by weight of a corrosion inhibitor selected from the group consisting of :

compounds of the general class

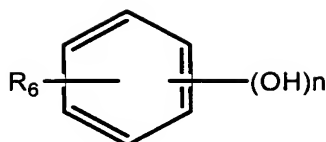


where X, Y, and Z, are chosen from C, N, O, S, and P; and

where pendant R groups R<sub>1</sub>-R<sub>5</sub> are chosen from H, a substituted C<sub>1</sub>-C<sub>6</sub> straight, branched or cyclo alkyl, alkenyl or alkynyl group, straight or branched alkoxy group, a substituted acyl group, amidyl group, hydroxyl group, a halogen, carboxyl group, alkoxyalkyl group, alkylamino group, alkylsulfonyl group, and sulfonic acid group;

salts of said compounds of the general class;

hydroxybenzene compounds of the general class



where  $n = 1-4$ , and

where  $R_6$  is present from 2 to 5 times and is chosen from H, a substituted  $C_1-C_6$  straight, branched or cyclo alkyl, alkenyl or alkynyl group, straight or branched alkoxy group, a substituted acyl group, amidyl group, a halogen, carboxyl group, alkoxyalkyl group, alkylamino group, alkylsulfonyl group, sulfonic acid group; and salts of said hydroxybenzene compounds.

61. (Previously presented) The composition of claim 60, wherein X is nitrogen, Y is nitrogen, Z is carbon, and  $R_1-R_5$  are hydrogen.

62. (Previously presented) The composition of claim 60, wherein X, Y, and Z are nitrogen,  $R_3$  is hydrogen, and  $R_4$  and  $R_5$  constitute a benzene ring.

63. (Previously presented) The composition of claim 60, wherein the corrosion inhibitor is selected from the group consisting of catechol, t-butyl catechol, gallic acid, and benzotriazole.

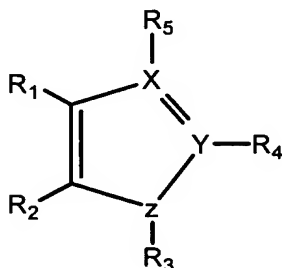
64. (Previously presented) The composition of claim 60, wherein the choline compound is choline hydroxide or a choline salt.

65. (Previously presented) A composition for stripping photoresist from integrated circuits using copper materials and low k dielectric materials consisting essentially of:

a choline compound;  
 water;  
 from about 2 to about 12% by weight of hydroxylamine or hydroxylamine salt;  
 an organic solvent selected from the group consisting of dimethyl acetamide, dimethyl sulfoxide, propylene glycol, dipropylene glycol monomethyl ether, N-methyl pyrrolidone, and cyclohexyl pyrrolidone; and

from about 0.5% by weight to about 5% by weight of a corrosion inhibitor selected from the group consisting of :

compounds of the general class

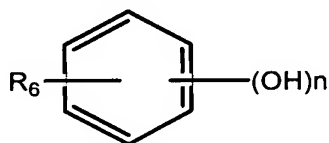


where X, Y, and Z, are chosen from C, N, O, S, and P; and

where pendant R groups R<sub>1</sub>-R<sub>5</sub> are chosen from H, a substituted C<sub>1</sub>-C<sub>6</sub> straight, branched or cyclo alkyl, alkenyl or alkynyl group, straight or branched alkoxy group, a substituted acyl group, amidyl group, hydroxyl group, a halogen, carboxyl group, alkoxyalkyl group, alkylamino group, alkylsulfonyl group, and sulfonic acid group;

salts of said compounds of the general class;

hydroxybenzene compounds of the general class



where n= 1-4, and

where R<sub>6</sub> is present from 2 to 5 times and is chosen from H, a substituted C<sub>1</sub>-C<sub>6</sub> straight, branched or cyclo alkyl, alkenyl or alkynyl group, straight or branched alkoxy group, a substituted acyl group, amidyl group, a halogen, carboxyl group, alkoxyalkyl group, alkylamino group, alkylsulfonyl group, sulfonic acid group; and salts of said hydroxybenzene compounds.

66. (Previously presented) The composition of claim 65, wherein X is nitrogen, Y is nitrogen, Z is carbon, and R<sub>1</sub>-R<sub>5</sub> are hydrogen.

67. (Previously presented) The composition of claim 65, wherein X, Y, and Z are nitrogen, R<sub>3</sub> is hydrogen, and R<sub>4</sub> and R<sub>5</sub> constitute a benzene ring.

68. (Previously presented) The composition of claim 65, wherein the corrosion inhibitor is selected from the group consisting of catechol, t-butyl catechol, gallic acid, and benzotriazole.

69. (Previously presented) The composition of claim 65, wherein the choline compound is choline hydroxide or a choline salt.

70-73. (Canceled).